

Application No. 10/719,312
Amendment Under 1.312 dated September 7, 2007
Reply to Notice of Allowance of June 29, 2007

AMENDMENTS TO THE DRAWINGS:

The attached sheets of drawings includes changes to Figs. 1, 7, 8, 9, and 11. These sheets, which includes Figs. 1, 7, 8, 9, and 11, replace the original sheets including Figs. 1, 7, 8, 9, and 11.

Attachment: 5 Replacement Sheets
5 Annotated Sheets Showing Changes

5. (Original) An image capturing apparatus according to claim 4, wherein said voltage controller decreases the reset level by decreasing a change quantity of the voltage value with respect to the first reset voltage.

6. (Original) An image capturing apparatus according to claim 4, wherein said voltage controller decreases the reset level by shortening an applying time of the first reset voltage.

7. (Currently Amended) An image capturing apparatus according to claim 3, further ~~comprises~~ comprising a calculator for determining a luminance range in which an image can be picked up in the moving object extraction image pickup state achieved at the reset level set at the preceding time,

wherein said voltage controller compares the luminance range calculated by said calculator with the object luminance detected by said detector, so as to vary the reset level based on the comparison result.

8. (Original) An image capturing apparatus according to claim 1, wherein said voltage controller further applies a second reset voltage to the second electrode, so as to reset the transistor to a normal image pickup state.

9. (Currently Amended) An image capturing apparatus according to claim 8, further ~~comprises~~ comprising a timer for counting a predetermined time after the start of the moving object extraction image pickup state,

wherein said voltage controller applies the second reset voltage to the second electrode in order to return to the normal image pickup state when the timer counts up the predetermined time.

10. (Currently Amended) An image capturing apparatus according to claim 1, further ~~comprises~~ comprising an operating member for manually varying the reset level.

11. (Original) An image capturing apparatus according to claim 1, wherein said plurality of reset levels include two reset levels which are different double or more in upper limit of the object luminance, at which the moving object extraction image pickup is achieved.

12. (Original) An image capturing apparatus comprising:
a solid image pickup element including a photosensitive element and a transistor, in which an output signal from the photosensitive element is input into a first electrode, for outputting a signal; and
a voltage controller for controlling a voltage to be applied to a second electrode of the transistor,
wherein the voltage controller applies a first reset voltage to the second electrode, so as to reset the transistor in such a manner that the image capturing apparatus is operated in a state of moving object extraction image pickup, and
wherein a voltage change quantity in applying the first reset voltage is smaller than a half of a voltage change quantity required for resetting the transistor in such a manner that the image capturing apparatus is operated in a normal image pickup state.

13. (Original) An image capturing apparatus according to claim 12, wherein said voltage controller further applies a second reset voltage to the second electrode, so as to reset the transistor to a normal image pickup state.

14. (Original) An image capturing apparatus according to claim 12, wherein solid image pickup element outputs the signal which is logarithmically varied with respect to an incident light intensity to the photosensitive element when the image capturing apparatus is operated in the normal image pickup state.

15. (Original) An image capturing apparatus comprising:
a solid image pickup element including a photosensitive element and a transistor, in which an output signal from the photosensitive element is input into a first electrode, for outputting a signal; and

a voltage controller for controlling a voltage to be applied to a second electrode of the transistor,

wherein the voltage controller applies a first reset voltage to the second electrode, so as to reset the transistor in such a manner that the image capturing apparatus is operated in a state of moving object extraction image pickup, and

wherein a period of time, during which the first reset voltage is applied, is shorter than a reset time required for resetting the transistor in such a manner that the image capturing apparatus is operated in a normal image pickup state.

16. (Original) An image capturing apparatus according to claim 15, wherein said voltage controller further applies a second reset voltage to the second electrode, so as to reset the transistor to a normal image pickup state.

17. (Original) An image capturing apparatus according to claim 15, wherein solid image pickup element outputs the signal which is logarithmically varied with respect to an incident light intensity to the photosensitive element when the image capturing apparatus is operated in the normal image pickup state.

18. (Original) An adjusting method for an image capturing apparatus provided with a solid image pickup element having pixels, including a photosensitive element and a transistor for receiving an output signal from the photosensitive element and outputting a signal, comprises the steps of:

calculating a reset condition of the transistor in order to achieve a moving object extraction image pickup at a luminance higher than an upper limit value within an assumed object luminance range; and

resetting the transistor in the calculated reset condition.

19. (Original) An adjusting method according to claim 18, wherein said reset condition is reset voltage applied to said transistor.

20. (Original) An adjusting method according to claim 18, wherein said reset condition is an applying time of the reset voltage applied to said transistor.

21. (Original) An adjusting method according to claim 18, wherein solid image pickup element outputs the signal which is logarithmically varied with respect to an incident light intensity to the photosensitive element.

REMARKS

Status Of Application

The allowance of claims 1-21, by the Examiner, is noted with appreciation.

The acknowledgement, in the Office Action, of a claim for foreign priority under 35 U.S.C. § 119(a)-(d), and that the certified copy of the priority document has been received, is noted with appreciation.

Drawings

Typographical errors were found in Figs. 1 and 11 where REGURATOR should read as REGULATOR; in Fig. 7 where IIMAGE should read as IMAGE and ELEMNT should read as ELEMENT; and in Figs. 8 and 9 where STARAT should read as START. Formal Replacement drawings are being submitted herewith for Figs. 1, 7, 8, 9, and 11 to correct the typographical errors. Applicant respectfully requests the approval of the Replacement drawings.

Claim Amendments

Claims 2, 3, 7, 9, 10, have been amended to correct errors of form. These changes are not necessitated by the prior art, are unrelated to the patentability of the invention over the prior art, and do not introduce any new matter.

No New Matter

This Amendment is being presented promptly after the discovery of the need therefor. This Amendment does not affect the scope of the claims, does not introduce any new matter, does not present any new issue, does not require any additional search, and will not present an undue burden on the personnel of the Patent and Trademark Office. Accordingly, it is respectfully requested that the Amendment be entered in accordance with 37 C.F.R. § 1.312.

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Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Sidley Austin LLP Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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